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Environmentally Conscious Design and Inverse Manufacturing, 1999. Proceed EcoDesign '99: First International Symposium On , 1-3 Feb. 1999

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[\[Abstract\]](#) [\[PDF Full-Text \(392 KB\)\]](#) **IEEE CNF**17 **Virtual disassembly-a software tool for developing product disman and maintenance systems***Gadh, R.; Srinivasan, H.; Nuggehalli, S.; Figueroa, R.;*

Reliability and Maintainability Symposium, 1998. Proceedings., Annual , 19-22 1998

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Compcon Spring '94, Digest of Papers. , 28 Feb.-4 March 1994

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20 **Life cycle thinking: application to product design**

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22 **Customer requirements research: providing input to quality function deployment**

Suther, T.W.; Sharkey, A.;

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24 **Design for environment development at Motorola**

Hoffman, W.F., III; Locascio, A.;

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25 **Development of virtual prototyping technology in the Samsung Engineering Project**

Heedong Ko;

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Changchien, S.W.; Lin, L.;

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Worhach, P.; Sheng, P.;

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De Langhe, P.; Criel, S.; Ceuterick, D.;

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A spreadsheet implementation of QFD and systems engineering approaches to support concurrent engi

Doukas, L. Pollock, G. Jeyaratnam, C.

Graduate Sch. of Eng., R. Melbourne Inst. of Technol., Vic., Australia;

This paper appears in: Innovation in Technology Management - The Key Leadership. PICMET '97: Portland International Conference on Manage Technology

Meeting Date: 07/27/1997 - 07/31/1997

Publication Date: 27-31 July 1997

Location: Portland, OR USA

On page(s): 815 - 820

Reference Cited: 5

Number of Pages: xlii+1018

Inspec Accession Number: 5739596

Abstract:

For an organisation to sustain its competitive advantage, there is a strong need for timely adjustment to ever rapidly changing customer demands. To achieve this, known customer needs must be prioritised and transformed into organised design requirements. This paper describes how a spreadsheet framework has been developed which incorporates a modified quality function deployment (QFD) as an engineering process (SEP) for product development and planning. The application of an analytic hierarchy process (AHP) is used as a means of ranking top level user requirements. The methodology provides a pro-active means and a strong link between quantified user requirements that are prioritised and **product design**/performance, assuring that downstream design is incorporated into trade-off decisions. An experiment was also presented to test and **evaluate** the spreadsheet approach in heavy engine projects.

Index Terms:

product development project engineering project management quality control research development management spreadsheet programs systems engineering analytic hierarchy process concurrent engineering heavy engineering projects organised downstream design requirements product development planning quality function deployment spreadsheet implementation systems engineering process top level user requirements ranking

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Consumer-centered product design specifications u fuzzy multivariate regression analysis

Kao, H.P. Kimbler, D.L. Juang, C.H. Bridges, W.C.

Nat. Central Univ., Taiwan;

This paper appears in: Uncertainty Modeling and Analysis, 1993. Procees Second International Symposium on

Meeting Date: 04/25/1993 - 04/28/1993

Publication Date: 25-28 April 1993

Location: College Park, MD USA

On page(s): 387 - 392

Reference Cited: 9

Inspec Accession Number: 4857656

Abstract:

To optimize **product design**, it is desirable that a functional model that descr correlation between the product attributes and the design specifications is ava new methodology which uses multivariate regression analysis is combined wit theory to model the correlation between consumer-perceived product quality a and designer-controlled design factors. The fuzzy regression model is then uti predict the quality level of the intended design. This method is most suitable w product has multiple quality attributes that could best be **evaluated** using lin terms

Index Terms:

computational linguistics fuzzy logic product development statistical analysis consum **product design** specification consumer-perceived product quality attributes designer-design factors fuzzy regression model fuzzy set theory linguistic terms multiple qual multivariate regression analysis product attributes

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Pages:634 - 642[\[Abstract\]](#) [\[PDF Full-Text \(268 KB\)\]](#) **IEEE JNL**2 **Designing environmental considerations in to products-a novel qualitative life cycle approach***O'Connor, F.; Blythe, D.;*Electronics and the Environment, 1997. ISEE-1997., Proceedings of the 1997 International Symposium on , 5-7 May 1997
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Yamaji, K.;

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**6 Intelligent decision support system for continuous improvement of
resource-saving and recycling-conscious manufacturing**

Sang-Jae Song;

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